"McGuiggin, John" <MCGUIGGIN@VOLPE.DOT.GOV>
10/17/02 04:41 PM

To: Paul Peronard/EPR/R8/USEPA/US@EPA, Jim Christiansen/EPR/R8/USEPA/US@EPA
cc: "Louis, Joan (EG&G)" <Louis@VOLPE.DOT.GOV>
Subject: FW: K105 Cost Increase

the attached document has valuable information for us. i will shortly have the cost breakdown, by activity, put together and will send that along too. talk to you monday (11 am mdt)...re: the budget.

-----Original Message-----
From: Mark Hallock [mailto:mjhallock@mac.com]
Sent: Wednesday, October 16, 2002 4:48 PM
To: Linda Byrne
Cc: John McGuiggin; Frank McDonnell; Bill Lippincott; Ted Vandervert; Larry Pennock
Subject: K105 Cost Increase

Linda,

As we discussed, the attached letter lists reasons for cost increases on Task Order T0005 plus our comments on reducing cost on future task orders.

Thanks,

Mark

Increased Cost Letter.do

KES

October 14, 2002

US DOT / RSPA / Volpe Center
55 Broadway, DTS-852
Cambridge, MA 02142
Attn: Orin Cook

Re: Libby Asbestos Project
Contract No. DTRS57-01-D-30006
Task Order No. 005
Residential Removals

Subj: Increase in Task Order Costs

Dear Mr. Cook:

During the execution of Task Order No. T0005 there were unanticipated changes in what was planned and what was required to finish the task order activities. These changes have resulted in an increase is the task order costs. Listed below for your review is a list of some the items that have caused a change in costs.

1. Rainy Creek Road Transfer and Decon Stations

During the task order negotiations KES and DOT had determined that there would be two activities at this site. Preparing and repairing Rainy Creek Road for truck traffic and construction of a truck decon station at the former decon station site at the half-mile mark at Rainy Creek Road.

The first cost increase occurred when KES was setting up the personnel decon at the bottom of Rainy Creek Road. There were several days delay while CDM safety personnel determined the proper location of the personnel decon. A site was chosen and KES began construction only to be informed that a new location had been selected. Work was stopped at the first site and the station was constructed at the second location. The concern was that the area outside of the gated "contaminated" area also has surface and windblown contamination. We were required to import and place baserock over the "contaminated" areas. The baserock was also an increase in cost. Later at the request of CDM and at the direction of DOT, the pop-up showers were removed and replaced with a decon trailer. The reason for this was that the Rainy Creek disposal operation would become a long-term activity associated with more that just KES's Task Order No. T0005. The mob, demob, setup and rental costs associated with the decon trailer were an increase in cost.

Another additional cost associated with the personnel decons was the generator run times. A negative air environment is maintained during all ZAI and dust removal activities from the start to obtaining final clearance. However, the decon trailer and

popup decon at the soil removal areas only need to maintain a negative air environment when actually in use. At the end of the day the decon trailer is shutdown and the doors are closed. Similarly, the pop-up decons at the soil removal residences are shut down and the visquine doors are taped shut. We have been required by CDM to also maintain a 24 hour a day negative air environment in the decon trailer and soil removal decon stations. The generators at each site are rented by the month based on an 8-hour day as verified by the hour meter on each unit. Running the generators 24-hours a day effectively triples the rental cost of the generator at each site.

The original plan was for two personnel to man the decon station during times when KES was transporting soil from the residences. This did not happen. Rainy Creek Road is made out of asbestos contaminated vermiculite. The construction of a transfer station and paving of Rainy Creek Road to the transfer station was needed to reduce dust control costs. As the paving was delayed, KES was required to place additional personnel and equipment on Rainy Creek Road to perform dust control activities.

KES also maintained and operated the transfer station and truck decon for other firms. This increased the overall equipment and man-hours at Rainy Creek Road.

2. Hoff Residence

Prior to mobilizing to the Hoff residence KES received direction from DOT requiring a modification to the exclusion zone fencing. The exclusion zone fencing was covered with flame retardant visquine and a mister system was installed on the top of the fencing. This increased the material, setup and teardown costs.

The estimated amount of soil to be removed from the Hoff residence increased from 164 CY to 380 CY. The increase was in both area and depth. The increased area required the removal of a rock flowerbed, the front sidewalk, a portion of the driveway and additional plants and trees. This caused an increase in both the removal costs as well as the restoration costs.

In addition, KES was directed to locate the top of the owner's septic tank. The septic tank was inoperable and there was concern that it may have been backfilled using vermiculite. All contaminated soil was removed without locating the septic tank. Its depth was below the contaminated soil. After the yard was deregulated, the septic tank was located and then removed and replaced by a firm hired by the owners. KES incurred additional costs to locate the septic tank and some delay costs during restoration while the septic tank contractor performed his work in the yard.

3. Champion Haul Road Site

At the start of activities at the site the contaminated area was marked by CDM.

The contaminated soil removal area significantly increased from the original estimate. The original removal areas were 4,500 SF of road and 2,000 SF along one side of the

road. The actual soil removal area was 5,370 SF of road and 15,400 along side of both side of the road. This increased labor, material and equipment costs for the soil removal and restoration activities.

CDM also marked trees that were to be removed. The increased area now included numerous trees and small brush that had to be removed prior to starting soil removal operations. CDM also wanted to collect air-monitoring data on tree and brush removal so the tree and brush removal activities were conducted in Level C. Tree removal in Level C was both slower and more dangerous. After removing the marked trees, the tree removal crew demobed from the site. That evening, CDM determined that additional trees had to be removed. The tree removal crew remobilized to the site and removed the additional trees.

It should also be noted that during negotiations DOT requested that KES reduce the tree removal costs by subcontracting this work out to a tree removal service as one multiple site project. KES marked every tree on each site that was designated for removal and obtained subcontractor bids to perform the tree removal. However, we lost the multiple site discount in the beginning because of the Level C requirement and at the end because of government scheduling. The negotiations between the government and the owners were not finalized at any of the sites until the start of activities at each site. Thus we were never able to perform multiple tree removals.

4. Tempel Residence

The tree removal at the Tempel residence was not negotiated with the owners until just prior to the start of activities at the site. This negated the potential for multiple site cost savings.

The area to be excavated also increased to include the removal of the sidewalks and driveway. There were removal and replacement costs for these items as well as delay costs during the CDM design stage.

Additional contaminated soil was also removed from within a dirt floor attached storage shed located at the back of the garage. This required the removal and cleaning and storage of some of the items and the removal, disposal and replacement of other items. It also required the mobilization of a mini-excavator to remove the soil. The soil removal went to a depth that also required the removal, temporary support, and replacement of the supports for the exterior wall of the attached storage shed. All of the associated work at this location was an increase in effort over the original cost estimate.

There was also a detached shed located at the rear of the property. The property items were originally going to be removed and replaced by the owners. KES was required to remove, clean and store some of items and remove, dispose of and replace other items. This was an increase from the original cost.

5. Westfall Residence

The tree removal at the Westfall residence was not negotiated with the owners until just prior to the start of activities at the site. This negated the multiple site cost savings.

There was a significant increase in the contaminated soil removal area at this site. The increased size of the contaminated area required the remobilization of the tree removal crew to remove additional trees in a Level C environment.

In addition to the increase in the amount of soil removed, contaminated soil was also found in several flowerpots and flowerbeds and planter boxes on the property. This required the removal, disposal and replacement of the soil, plants, flowerpots and planter boxes. Additional setup and teardown costs were also associated with each of these new areas.

6. Spencer Residence

The contaminated soil removal area at this site increased from one location to one large and four small areas. The smaller areas were removed using a vacuum truck. All of the setup, removal, teardown and restoration costs associated with the four areas were an increase from the original proposal. There was also an increase in contaminated soil removal at the large contamination area. This caused an increase in costs as well.

In addition to the increased soil removal costs there was an additional increase in restoration costs. During the negotiations between the government and the owner the restoration at the large soil removal area was changed from reseeding the area to replanting trees and shrubs.

The tree and brush removal at this site was also performed in Level C, which increased the costs.

7. Sandersen (Smith) Residence

At the Smith residence the estimated amount of soil removal decreased from the original estimate. The playhouse was sampled and did not need to be replaced. The playhouse was required to be covered with visquine. These resulted in a cost savings. However, there was contaminated soil located under the rear deck. This required the removal and replacement of the rear deck and steps. Please note that the deck replacement cost was partially disseminated during the site walk. Unfortunately, I was not made aware of the requirement and subsequently did not include any associated cost in the original cost proposal.

In negotiations between the government and the owners the large yard area was restored with sod in lieu of seeding. This was an increase in costs.

The ZAI removal in the attic and dust removal in the house were eliminated during the site walk. Prior to beginning activities at this site, CDM discovered ZAI in the space between the first floor ceiling and second floor flooring. The required the removal, cleaning and storage of the items in the upstairs and the indoor dust removal in the entire house. This also required the removal and replacement of the upstairs carpeting, flooring and insulation. There were also sheetrock and painting repairs that were needed after the ZAI removal activities. All of the activities in the house represent an increase in cost.

8. Scheduling

Originally, KES was going to perform the removal activities with removal crews working at two residences and one restoration crew bouncing between sites as needed. What happened was that there were delays that did not allow KES to perform removal activities at more that one house at a time. By only performing removal activities at one site at a time the overall length of the task order was increased. This caused an increase in field overhead costs.

Some of the typical delays were as follows:

- KES was not allowed to begin new sites if they could not be started and completed before the five-day Labor Day holiday.
- Delays in finding accommodations for relocating the owners and the Libby festivals taking up available accommodations caused delays in scheduling.
- Extended time needed for completion of the site reconnaissance caused delays in scheduling.
- Extended time needed to complete government / owner negotiations caused delays in scheduling.

KES Recommendation:

In addition to just listing why the costs were increased, we would like to offer the following suggestions in order to reduce costs on future task orders.

1. Pre-construction activities

An in-depth site reconnaissance needs to be conducted prior to preparation of the contractor's cost estimate. The contractors need a realistic estimate of the excavation boundaries, exclusion zone boundaries, and property items that need to be cleaned or replaced. Additional reconnaissance at the soil and ZAI removal sites would further refine the estimate for removal and restoration. It would also allow the homeowner negotiations to be completed prior to and without delaying the work. It would also

greatly reduce the need for work stoppages and owner / government renegotiations during the project.

2. Scheduling

In order to reduce the associated overhead costs, removal activities need to be performed at two to three houses at a time.

3. Trees

It is the opinion of this contractor that large trees should be saved rather than removed. The costs associated with the removal and replacement of large trees is significantly higher than the cost to perform hand surface removal under the drip line of the trees. It is unlikely that owners will remove large trees in their yard. In the event that an owner does decide to remove a tree at a latter date, then the risks will be no greater than removing trees outside of a contaminated soil removal area, or performing septic tank repairs or excavating around buried utilities. A guideline procedure should be developed for homeowners doing any kind of future excavations or home remodeling activities.

4. Rent vs. Own

The typical rental cost in the Libby area is 1/3 to 1/4 of the purchase price of the unit. Since the Libby asbestos project will be ongoing for several years, it makes sense to look at purchasing those items that are used on each or nearly all of the sites. These include fencing, pumps, small equipment such as skip loaders, bobcats, pickup trucks, office trailers, temporary power poles, generators, conex boxes, poly baker tanks, etc. At the end of the project the items could be sold at a government auction.

5. Watertrucks

At each site there is a need for a water source. It is undesirable to hookup to owner's wells due to liability issues. The owner's city service is usually inadequate. Currently we are using a watertruck at each site. We would suggest that the government purchase 2,000 and 4,000-gallon poly tanks and pumps. The cost to purchase a reusable poly tank and pump will be far less than the rental of a watertruck. Thus, a single watertruck could service multiple site by filling the poly tanks as needed. The tanks and pumps could be moved from site to site and reused over the course of the project. At the end of the project the items could be sold at a government auction.

6. Mister System

We were required to install, maintain and takedown a mister system around the perimeter exclusion zone fencing. The system is made up of polyethylene tubing, mister nozzles, manifold system, a poly water tank and a pump system. While observing this system in operation, we feel that it can be eliminated without any

significant increase in risk to the public. To be honest, we feel the system is for show and is an unnecessary cost.

7. Concrete Slabs, Driveways and Sidewalks

We have been required to remove driveways and sidewalks during soil removal on some of the houses. We think that the government ought to consider and or establish guidelines as to if and when the risk to the public justifies the removal of concrete slabs, sidewalks and driveways.

8. Paving of Rainy Creek Road

We feel that it is in the government's best interest to pave Rainy Creek Road to the transfer station. The cost of performing dust control on an unpaved road constructed of asbestos contaminated vermiculite is not justified. The new paved transfer / decon station will reduce labor and equipment costs.

Should you have any questions or comments please call me at 406-293-4160.

Sincerely,

Mark Hallock
Sr. Project Manager
Kuo Environmental, Inc.